



TSE 7501
NLJD Non Linear Junction Detector

TSE 7502
TSCM Search Tool Kit

NLJD NON-LINEAR JUNCTION DETECTOR

TSE 7501

TSE 7501 is small, lightweight and robust for the harshest of environments. Non-linear Junction Detectors are an essential tool for electronic countermeasure searches, explosive ordnance disposal and a variety of security applications.

The TSE 7501 is a state-of-the-art Non-Linear Junction Detector which valuates hidden electronic devices, regardless of whether the electronic device is passive or active.

Provides evaluation of both 2nd and 3rd harmonic returns. Strong 2nd harmonic (red) indicates true electronic components, while strong 3rd harmonic (green) indicates false corrosive junctions. Received signal strength indication of RX1 (true target) & RX2 (false Target).



Revolutionary design; all in one single body unit, or as with previous TSE models the antenna is separated from the control module.

TECHNICAL ADVANTAGES

- Channel selectable; four operating frequencies to ensure potential interfering signals are avoided, (FCC 915MHz, EU 869MHz and classic 888MHz; Available in one unit for universal operation). The four spot frequencies are customer selectable.
- High Power Transmission to rapidly search a large area with greater penetration; adjustable power control 2mW to 1Watt (2Watt optional).
- Constant power transmission, as opposed to pulsed operation. (Continuous transmission reduces risk of missing a threat from inadvertent rapid movement of antenna head.)

XD ADVANCEMENTS

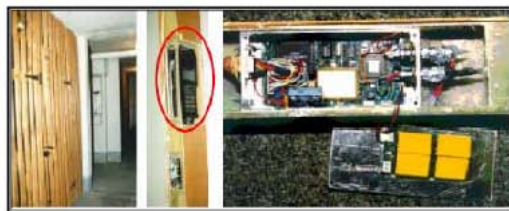
- Unique 4-way thumb control conveniently placed on display screen for most commonly used functions.
- Ergonomic sweep head with increased sensitivity reduces search time, 6dBi gain.
- Circularly Polarized Antenna improves reliability, and reduces risk of missing a threat due to incorrect antenna polarization.
- Quick fit removable smart battery housed inside control module; provides over 2hrs operation.
- Minimum set-up time; extension Lengths 52 - 208cm.
- Robust, lightweight aluminum, fiberglass and carbon design; operational weight only 2kg; in transit case 5.6kg.

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The TRANSIT CASE has a double safety lock. There is a pressure release valve positioned below the handle. Should the equipment be subject to change in altitude or temperature the valve will automatically open.



Detection by NLJD of a GSM phone & microphone installed in a wall

PHYSICAL DATA

| | |
|------------------|---|
| TRANSIT CASE | Black, molded in structural resin, foam inserts. Dimensions: 48 cm x 34 cm x 12 cm. Weight 2.24 kg. |
| CONTROL MODULE | Black, machined aluminum case and protective pouch. Dimensions: 21 cm x 11 cm x 4 cm. Weight 0.98 kg. |
| DISPLAY MODULE | Black, aluminum tube, plastic facial display, foam grip. Dimensions: 35 cm x 3.6 cm diameter. Weight 0.36 kg. |
| ANTENNA HEAD | Black, fiberglass and abs, aluminum bracket. Dimensions: 17 cm diameter by 4 cm. Weight 0.40 kg. |
| EXTENSION TUBE | Black, aluminum tube, foam grip. Dimensions: 36 cm by 2.5 cm diameter. Weight 0.18 kg. |
| SEPARATION LEAD | Black, co-ax lead with protective braid covering. Dimensions: 120 cm. Weight 0.32 kg. |
| 110/240 CHARGER | Black, plastic housing complete with lead and plug. Dimensions: 14 cm x 7.5 cm x 6 cm. Weight 0.48 kg. |
| EARPHONEs | Black, lightweight, plastic, rubberized ear grip. Dimension 6 cm by 4 cm by 4 cm. Weight 0.02 kg. |
| BATTERY PACK (2) | Black, Nickel Metal Hydride battery, plastic. Dimensions: 15 cm x 5 cm x 1.5 cm. Weight 0.32 kg. |
| COMPLETE SYSTEM | Total Weight of all items above in transit case. Weight 5.6 kg. |

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TECHNICAL DATA

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|-----------------------|---|
| TRANSMITTER | |
| Frequency range | Four spot frequencies in the range of 869-916 MHz. (dependent on country of use). |
| Power output | Adjustable 2mW to 1W ERP (2 W optional). |
| Filtering | 10 section filter. |
| Output connector | 50 ohm double screened co-ax socket. |
| RECEIVER (RX1) | |
| Frequency range | 1738 - 1832 MHz (Transmitter selection controls receiver frequencies). |
| Sensitivity | Detection at -130 dBm. |
| Filtering | 6 section filter. |
| Input connector | 50 ohm double screened co-ax socket. |
| RECEIVER (RX2) | |
| Frequency range | 2607-2748 MHz (Transmitter selection controls receiver frequencies). |
| Sensitivity | Detection at -130 dBm. |
| Filtering | 6 section filter. |
| Input connector | 50 ohm double screened co-ax socket. |
| DISPLAYS | Target response/comparison. Transmitter output power. Battery level, Mode selection (RX1 and RX2). Frequency selection, signal strength (R1 and R2). |
| CONTROLS | 4 way thumb control selects Range and Receiver selection. Volume up and down, Frequency select and ON/OFF |
| ANTENNA | |
| Frequency coverage | 860-920 MHz, 1720-1840 MHz and 2580-2760 MHz |
| Gain | 6 dbi. |
| Polarization | RHC Right hand circular. |
| CHARGER | |
| Input voltage | 100-240 VAC. |
| Charging current | 1200mA/auto trickle charge. |
| Charge time | Up to 1.5 hours. |
| Type | Microprocessor controlled, short circuit and timer |
| BATTERY | |
| Type | Nickel metal hydride - smart battery. |
| Voltage | 10.8V DC/1700 mAh. |
| Test | Built in battery level indicator. |
| Run time | 2 hours - normal operation. |

PRODUCT CODES

| | |
|-----------|----------------------------|
| 3-299-266 | TSE7501 – 1 WATT MAX (ERP) |
| 3-299-228 | TSE7501 – 2 WATT MAX (ERP) |

TSCM SEARCH TOOL KIT

TSE 7502

The TSE 7502 TSCM SEARCH TOOL KIT contains selected tools for verifying the existence of threatening electronic surveillance devices.

This tool kit is normally used with the TSE 7501 Non-linear Junction Detector and provides tools that are uniquely suited for use with a Non-Linear Junction Detector. The toolkit comes in a leather tool bag.



INCLUDED INSPECTION TOOLS

- Borescope with built-in light and right-angled viewer for inspection inside walls, furniture, etc...
- Wire tracing system to trace miscellaneous cables.
- Fluke multi-meter for testing miscellaneous cables and electronic devices.
- Combination stud finder and metal detector for non-destructive evaluation.
- Hammer to evaluate the stability of a junction under physical vibration.
- Ultra-Violet light and Marking Pen
- Multi-purpose geared screwdriver. Provides screwdriver function as well as small drill for use with Borescope.
- Miscellaneous Tools: pliers, wire cutters, leather man (multi-purpose tool), inspection mirrors, measuring tape, flashlight, drill bits for walls.

OPTIONS

- 7502/A advanced search toolkit is available on request



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or would like to discuss a specific requirement or project, please contact us at:

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